



Universidade do Minho
Escola de Arquitetura

Drawing to see

Ambiguity in drawing^{*}

Natacha Antão Moutinho
painter / assistant professor / researcher
EAUM / Lab2PT

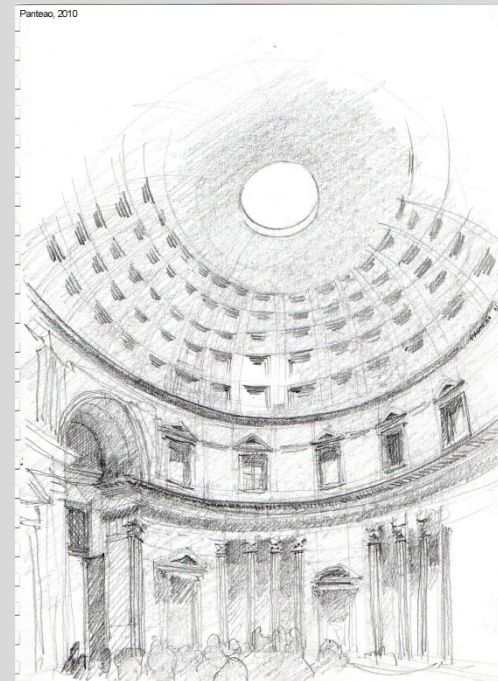
Noite Baia, 2010

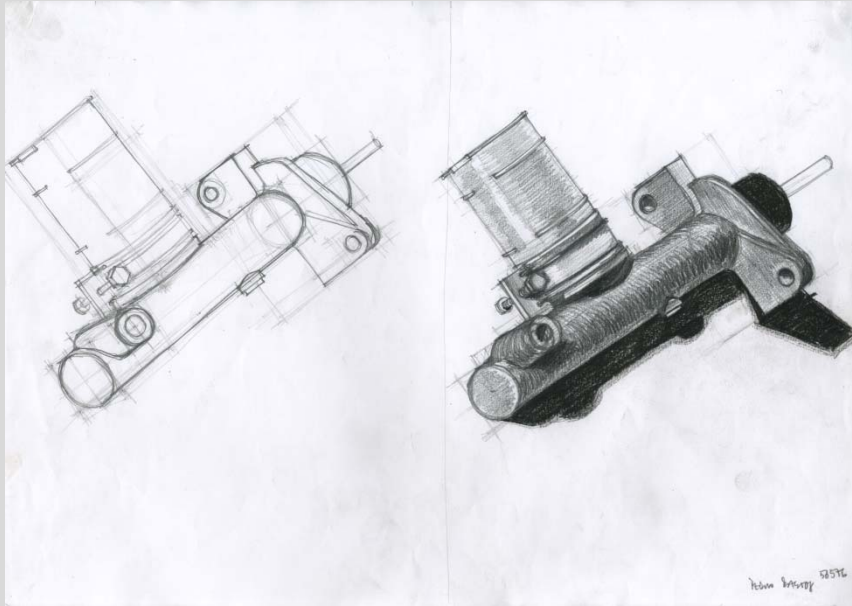


Em Viagem, 2010



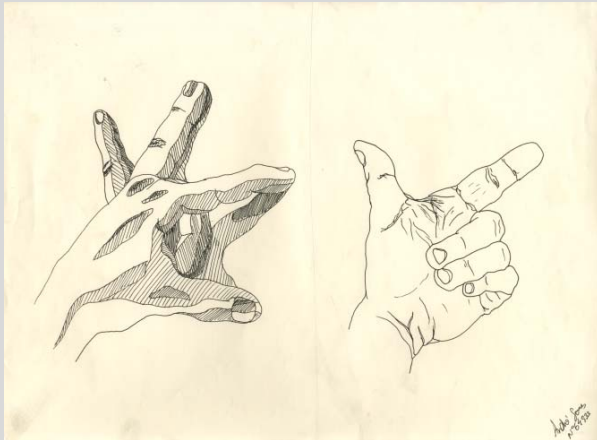
Panteão, 2010



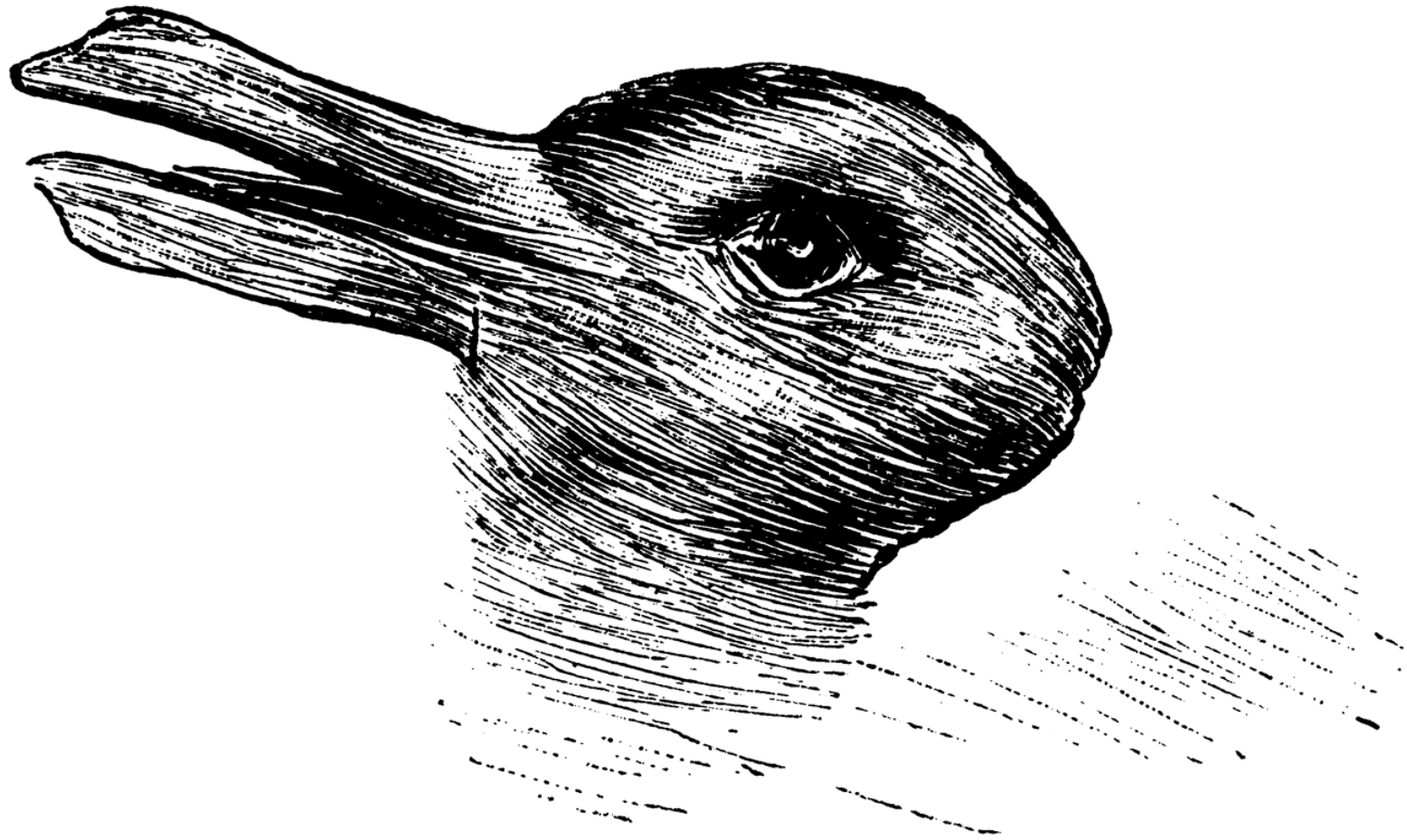


Student's drawings

(Hill, 1966)
(Rawson, 1987)



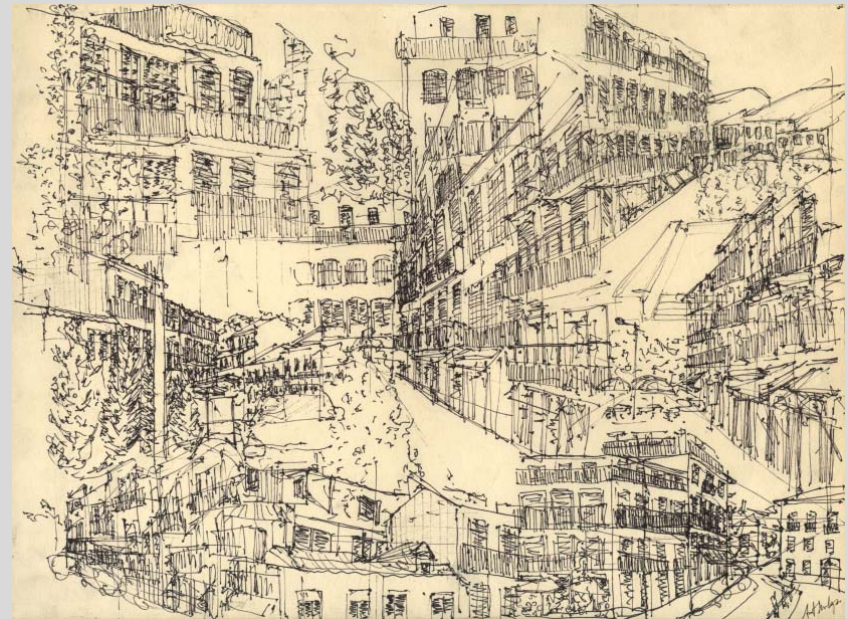
Welche Thiere gleichen ein-
ander am meisten?

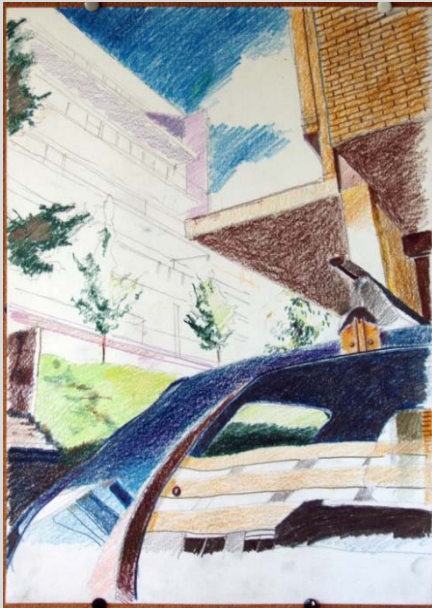


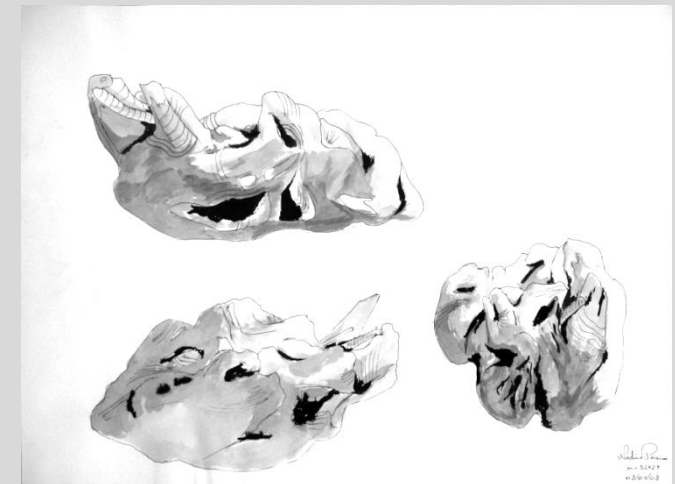
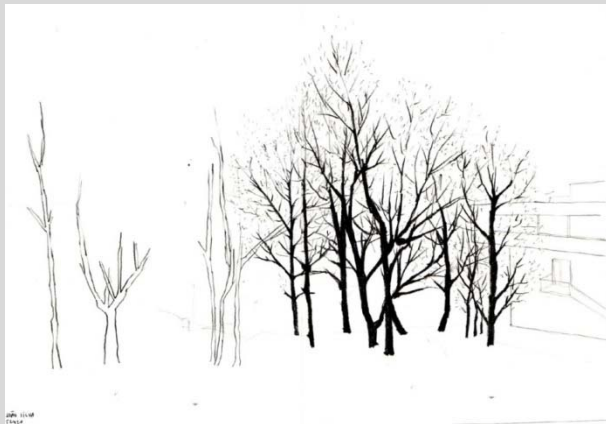
Kaninchen und Ente.



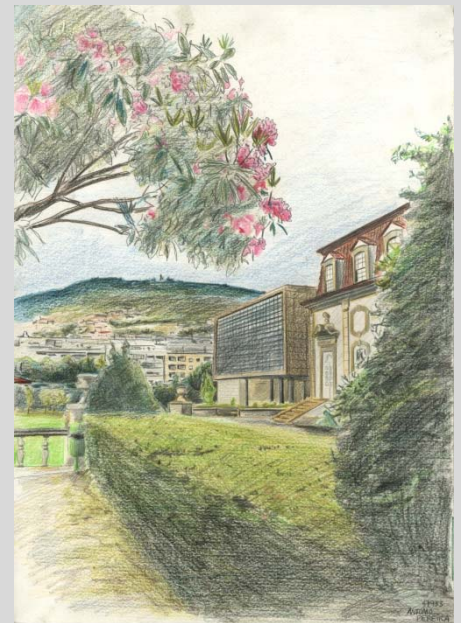
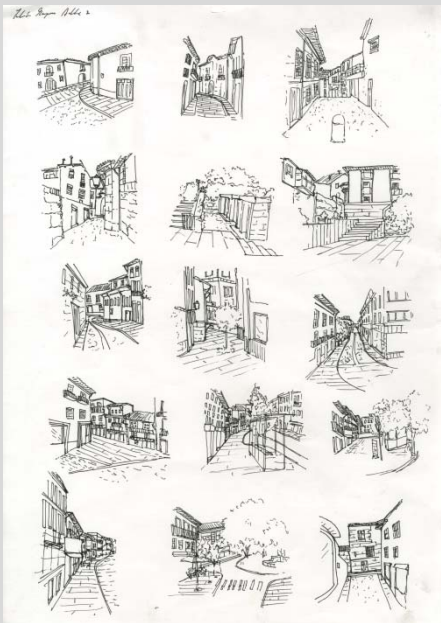
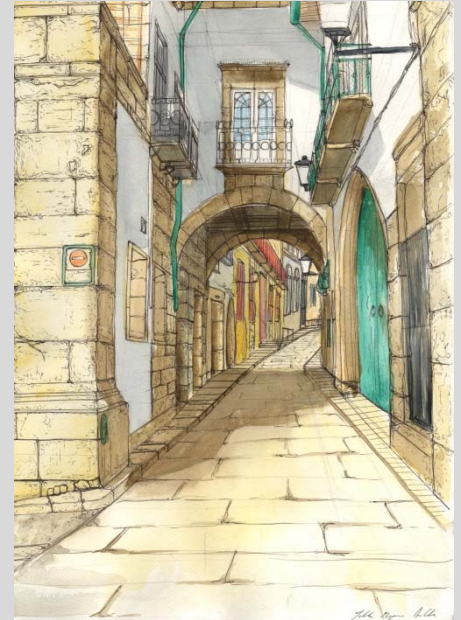
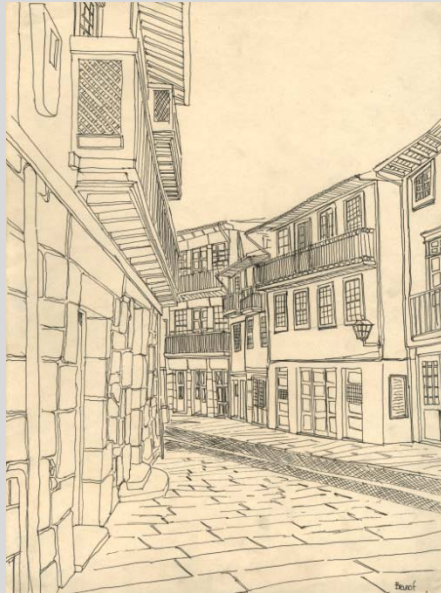
Diagramas.







Student's drawings

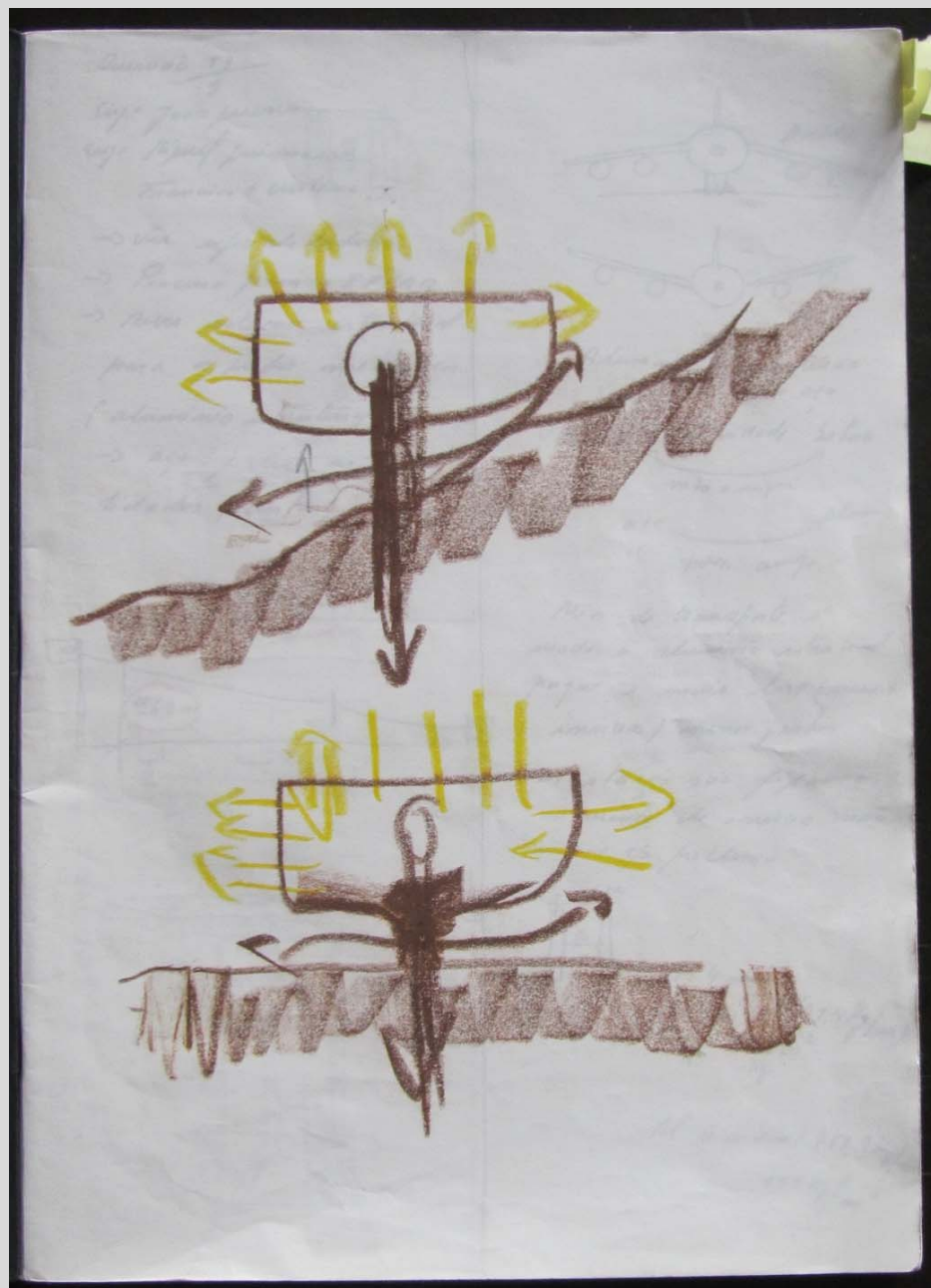




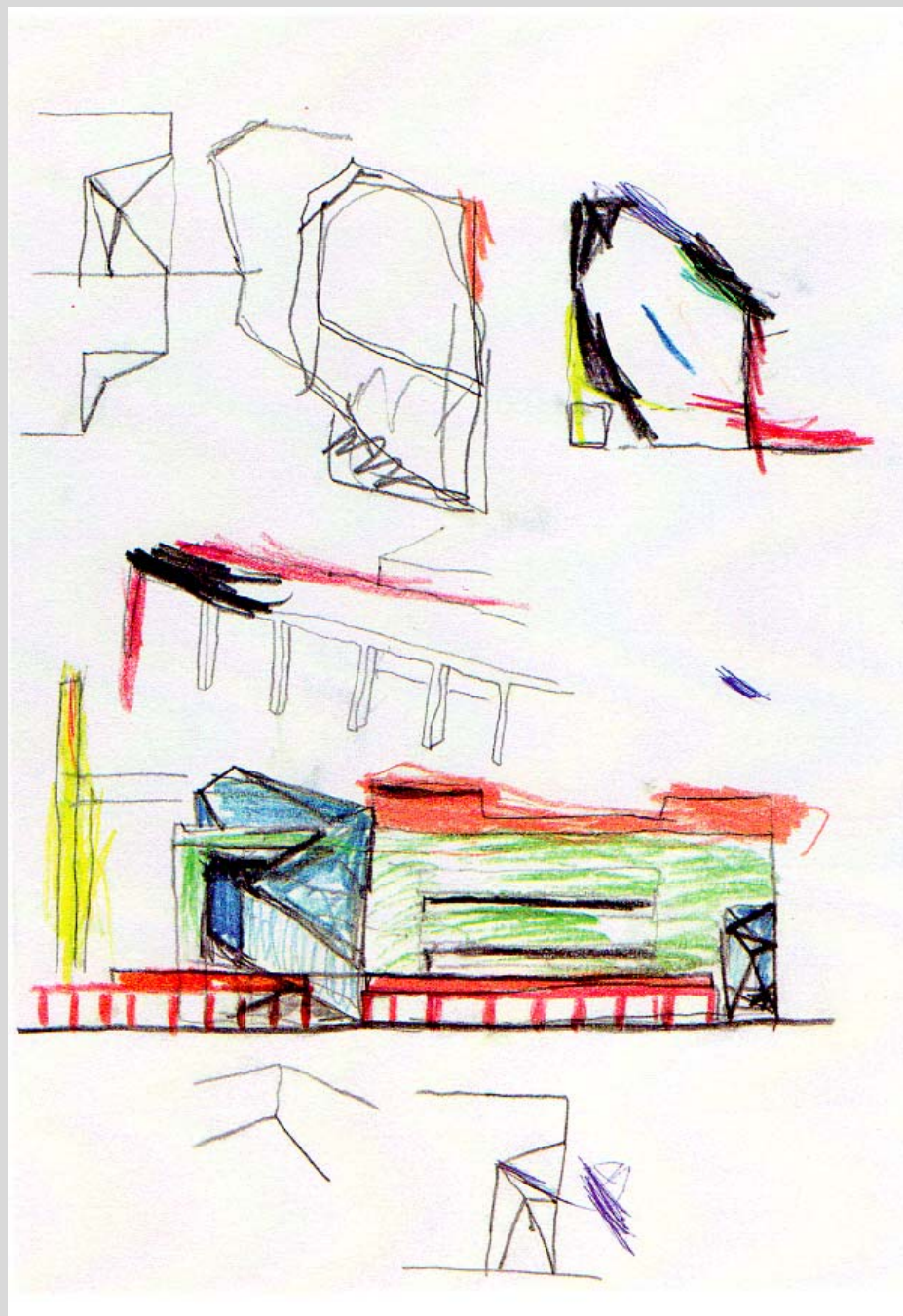
empresa / nome	actividade	empresa / nome	actividade
GPIC	engenharia elec	GPIC	engenharia elec
Projectos, consultoria e Instalações, lda		Projectos, consultoria e Instalações, lda	
morada		morada	
Rua 15 de Novembro, 89		Rua 15 de Novembro, 89	
4100-421	Porto	4100-421	Porto
Portugal		Portugal	
telef. 1ª morada	telemóvel	telef. 1ª morada	telemóvel
22 606 76 03	22 609 18 76	22 606 76 03	22 609 18 76
2ª morada		2ª morada	
telef. 1ª morada	telemóvel	telef. 1ª morada	telemóvel
nº contribuinte	nº cliente	nº contribuinte	nº cliente
nome	carimbo	nome	carimbo
Raul Serafim Barros Silva	91 991 97 71	Raul Serafim Barros Silva	91 991 97 71
Alexandre Martins	91 991 97 72	Alexandre Martins	91 991 97 72

Handwritten signature: Alexandre Martins

Nuno Brandão Costa, FCSH Library, New University of Lisbon, 1999. Elevation, 20x30cm. Author's collection. Retrieved from "Desenho Projecto de Desenho" (2002), p.54.



Francisco Vieira de Campos (1962 -). Cable car cutting, 2007, Vila Nova de Gaia Cable Car 2007-2010, pastel on paper in notebook .. Implementation study, 2006, Afife House, wax on paper. Private Collection.



Egas José Vieira, Pedagogical Unit Pole II of the University of Coimbra, 1996. Survey of elevation and study of volumes, 30x21cm. Contemporary Collection

Hill, E., 1966. *The Language of Drawing*. New Jersey : Prentice Hall.
Livingstone, M., 2002. *Vision and Art - The biology of seeing*. New York: Abrams.
Pearson David G. & Alexander Clare, 2001. Working Memory and Expertise differences in design.
Visual and Spatial Reasoning in Design.
Rawson, P., 1987. *Drawing*. 2th edition (1th edition 1969) ed. s.l. : University of Pennsylvania Press.
*Willats, John, 2006. Ambiguity in Drawing. *Tracey*.

Thank you

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